

## ABSTRACT

The disclosed device for audio frequency range expansion compensates the vocal range by a small quantity of operation, and improves the tone quality and verbal perception. Analog-to-digital converting means converts an input  
5 analog narrow frequency band audio signal into a digital signal. Voiced/voiceless judging means distinguishes the voiceless sound section and voiced sound section of audio signal. Aliasing signal generating means disposes sampled signals on every relevant order of sample point of digital signals issued from the analog-to-digital converting means, and replaces the value of the every  
10 relevant order of sample point spuriously with zero value. A filter changes over the filter characteristic based on the judged result of the voiced/voiceless judging means. Digital-to-analog converting means converts an output digital signal from the filter into an analog signal.

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